

## **CLAIMS**

### **WHAT IS CLAIMED IS:**

- 1    1.    A method to manage interactions between applications and a data  
2    store, comprising:  
3        (a) concurrently extracting data from a data store into a first queue;  
4        (b) concurrently servicing a plurality of applications with portions of  
5    the data from the first queue;  
6        (c) concurrently loading results data into a second queue, wherein the  
7    plurality of applications concurrently produce the results data;  
8        (d) concurrently populating the results data into a temporary table;  
9    and  
10        (e) merging the temporary table with a data store table of the data  
11    store.
  
- 1    2.    The method of claim 1 further comprising:  
2        (f) establishing a plurality of first queues, wherein each first queue is  
3    associated with a separate processing node that executes a subset of the  
4    plurality of applications and each first queue includes the extracted data and  
5    concurrently services the subset of the plurality of applications on the  
6    separate processing node; and  
7        (g) establishing a plurality of second queues, wherein each second  
8    queue is associated with the separate processing node that executes the  
9    subset of the plurality of applications and each second queue is currently  
10    loaded with results data from the subset of the plurality of applications and  
11    concurrently populates a second table, which is merged with the temporary  
12    table before performing the merging.
  
- 1    3.    The method of claim 1 wherein (b) further includes concurrently  
2    servicing a number of the applications from a first processing node and  
3    concurrently servicing a remainder of the applications from a second

4 processing node, wherein the first queue resides on the first processing  
5 node.

1 4. The method of claim 1 wherein (c) further includes currently loading  
2 the second queue with portions of the results data acquired from a number  
3 of the applications processing on a first processing node and remaining  
4 portions of the results data acquired from a remainder of the applications  
5 processing on a second processing node, wherein the second queue  
6 resides on the first processing node.

1 5. The method of claim 1 wherein (d) further includes currently  
2 populating the temporary table with portions of the results data received  
3 from the second queue associated with a number of the applications  
4 processing on a first processing node and with remaining portions of the  
5 results data received from a different second queue associated with a  
6 remainder of the applications processing on a second processing node,  
7 wherein the second queue resides on the first processing node and the  
8 different second queue resides on the second processing node.

1 6. The method of claim 1 further comprising (f) concurrently initiating a  
2 number of the applications on a first processing node and a remainder of the  
3 applications on a second processing node.

1 7. The method of claim 6 processing further comprising concurrently  
2 establishing the processing of (b)-(d) on the first processing node and the  
3 second processing node.

1 8. A method to manage interactions between applications and a data  
2 store, comprising:  
3 receiving a query for a data store and an identifier for an application  
4 that desires to process the results of the query and update the data store

5 with application data;  
6 concurrently initiating multiple instances of an application associated  
7 with the identifier on multiple processing nodes;  
8 concurrently processing the query and housing the results in one or  
9 more application queues residing on one or more of the processing nodes;  
10 and  
11 concurrently servicing each of the instances of the application from  
12 the one or more application queues.

1 9. The method of claim 8 further comprising:  
2 concurrently housing the application data in one or more load  
3 queues residing on one or more of the processing nodes; and  
4 concurrently populating one or more tables residing on one or more  
5 of the processing nodes with the application data from the one or more load  
6 queues.

1 10. The method of claim 9 further comprising merging the one or more  
2 tables into the data store.

1 11. The method of claim 8 wherein the currently initiating further includes  
2 determining a total number of the applications to initiate based on  
3 configuration data.

1 12. The method of claim 11 wherein the currently initiating further  
2 includes determining which of a number of the applications that are to be  
3 initiated on which of a number of the processing nodes based on the  
4 configuration data.

1 13. The method of claim 8 further comprising concurrently synchronizing  
2 the application queues and the load queues on the multiple processing  
3 nodes when at least some of the processing nodes lack one of the one or

4 more application queues or one of the one or more load queues.

1 14. The solution template system of claim 13 wherein the concurrently  
2 synchronizing further includes establishing socket based communications  
3 between the multiple processing nodes with a Transmission Control  
4 Protocol/Internet Protocol (TCP/IP).

1 15. A data store application management system, comprising:  
2 one or more application queues for servicing one or more  
3 applications with results of a query to a data store;  
4 one or more load queues for housing application data produced by  
5 the one or more applications; and  
6 a merge utility for merging the application data into a data store table.

1 16. The system of claim 15 further comprising a configuring utility for  
2 determining a total number of the one or more applications.

1 17. The system of claim 15, wherein the configuring utility initiates a  
2 number of the one or more applications, the one or more application  
3 queues, and the one or more load queues on separate processing nodes.

1 18. The system of claim 15, wherein each of the one or more applications  
2 concurrently processes the results and produces different portions of the  
3 application data.

1 19. The system of claim 18, wherein each of the one or more application  
2 queues and each of the one or more load queues concurrently update while  
3 the one or more applications process.

1 20. A data store residing in a computer-readable medium, comprising:  
2 one or more temporary tables that temporarily house application data  
3 produced from concurrently processing applications in response to  
4 concurrently provided query results extracted from the data store; and  
5 an application data table that houses application data once the  
6 applications have finished producing the application data, and wherein the  
7 one or more temporary tables are merged into the application data table.

1 21. The data store of claim 20 wherein a merge utility merges the one or  
2 more temporary tables to produce the application data table once each of  
3 the plurality of applications have finished processing the query results.

1 22. The data store of claim 20 wherein one or more extract utilities  
2 perform a query against the data store in order to acquire the query results,  
3 which are concurrently consumed by the one or more applications to  
4 produce the application data.

1 23. The data store of claim 22 wherein each of the one or more extract  
2 utilities concurrently populate the query results to one or more application  
3 queues.

1 24. The data store of claim 23 wherein each of one or more load utilities  
2 concurrently receive portions of the application data from one or more load  
3 queues and concurrently populate the portions to the one or more temporary  
4 tables.

5  
6 25. The data store of claim 22 wherein the data store is a least one of  
7 one or more databases and a data warehouse.